DATE: 08/06/1999 TIME: 11:54:14

INPUT SET: S32807.raw

This Raw Listing contains the General Information Section and up to the first 5 pages.

```
SEQUENCE LISTING
 1
                                                            ENTERED
 2
 3
           General Information:
    (1)
          (i) APPLICANT: Martin Roland Jensen
 5
                         Soren Mouritsen
 6
 7
                         Henrik Elsner
 8
                         Iben Dalum
 9
10
        (ii) TITLE OF INVENTION: Modified human TNF-alpha molecules, DNA
                 encoding them, and vaccines containing said modified
11
12
                 TNF-alpha or DNA
13
14
        (iii) NUMBER OF SEQUENCES: 42
15
        (iv) CORRESPONDENCE ADDRESS:
16
               (A) ADDRESSEE: Farmaceutisk Laboratorium Ferring A/S
17
               (B) STREET: Indertoften 10
18
19
               (C) CITY: Vanloese
20
               (E) COUNTRY: Denmark
21
               (F) ZIP: DK-2720
22
23
        (v) COMPUTER READABLE FORM:
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               (A) MEDIUM TYPE: Floppy disk
25
               (B) COMPUTER: IBM PC compatible
               (C) OPERATING SYSTEM: PC-DOS/MS-DOS
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               (D) SOFTWARE: PatentIn Release #1.0, Version #1.30 (EPO)
27
28
29
        (vi) CURRENT APPLICATION DATA:
30
               (A) APPLICATION NUMBER: 09/060,294
               (B) FILING DATE: 15-APR-1998
31
32
         (vii) PRIOR APPLICATION DATA:
33
               (A) APPLICATION NUMBER: 60/044,187
34
35
               (B) FILING DATE: 24-APR-1997
36
37
        (viii) ATTORNEY/AGENT INFORMATION:
38
               (A) NAME: Price, D. Douglas
               (B) REGISTRATION NUMBER: 24,514
39
               (C) REFERENCE/DOCKET NUMBER: P60953US1
40
41
        (ix) TELECOMMUNICATION INFORMATION:
42
43
               (A) TELEPHONE: (202) 638-6666
44
               (B) TELEFAX: (202) 393-5350
45
    (2) INFORMATION FOR SEQ ID NO: 1:
46
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RAW SEQUENCE LISTING PATENT APPLICATION US/09/060,294

INPUT SET: S32807.raw

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47
          (i) SEQUENCE CHARACTERISTICS:
48
               (A) LENGTH: 477 base pairs
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50
               (B) TYPE: nucleic acid
51
               (C) STRANDEDNESS: double
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               (D) TOPOLOGY: linear
53
         (ii) MOLECULE TYPE: cDNA
54
55
        (iii) HYPOTHETICAL: NO
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57
         (iv) ANTI-SENSE: NO
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        (vi) ORIGINAL SOURCE:
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61
               (A) ORGANISM: Homo sapiens
62
63
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73
74
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                                                                              96
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82
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DATE: 08/06/1999 TIME: 11:54:15

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109						Ser											
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111		100					100										
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113						Gln											
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115	145					130					100						
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126		(xi) SE	QUENC	CE DI	ESCRI	PTIC	on: s	SEQ I	ED NO): 2:	:					
126 127	Me+	, ,		_									Tle	T.vs	Δla	Δsn	
126 127 128		, ,		_	Ser	Ser				Ser			Ile	Lys		Asn	
126 127 128 129	Met 1	, ,		_									Ile	Lys	Ala 15	Asn	
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155		АТА	GIU	ser	СТĀ	Gln	vaı	Tyr	Pne	GIY	11e	тте	Ата	Leu			
156 157	145					150					133						
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167		(ii) MOI	LECUI	E T	YPE:	DNA	(ge	nomi	C)							
168		`	•					```		•							
169		(iii) HYI	РОТНІ	ETICA	AL: I	OV										
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171		(iv) AN'	ri-si	ENSE	: NO											
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186		(***	, 52	20211	, , , , , , , , , , , , , , , , , , ,	JD 01(.			JLQ .			•					
187	ATG	GTC	AGA	TCA	тст	TCT	CGA	ACC	CCG	AGT	GAC	AAG	CCT	GTA	GCC	CAT	48
188						Ser											
189	160		3			165					170	•				175	
190																	
191	GTT	GTA	GCA	AAC	CCT	CAA	GCT	GAG	GGG	CAG	CTC	CAG	TGG	CTG	AAC	CGC	96
192	Val	Val	Ala	Asn	Pro	Gln	Ala	Glu	Gly	Gln	Leu	Gln	Trp	Leu	Asn	Arg	
193					180					185					190		
194																	
195						CTG											144
196	Arg	Ala	Asn		Leu	Leu	Ala	Asn	_	Val	Glu	Leu	Arg		Asn	Gln	
197				195					200					205			
198										~=~				~ 3 ~	ama	ama	100
199						GAG											192
200	Leu	vaı		Pro	ser	Glu	стÀ		тyr	Leu	тте	ryr		GIN	vaı	Leu	
201			210					215					220				
202	mma	CAC	m a cr	ת וחת	220	GCC	מ א א	THC/C	אאמ	ատա	אייים	acc	አመጣ	אככ	GAG	CTC	240
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204	FIIG	225	туг	тте	гур	WIG	230	Ser	րֆո	FIIE	TTG	235	TTE	TIIL	GIU	Leu	
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231						f: 15			acio	ds.							
232						amir											
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			(1)) T(DPOL	OGY:	line	ear									
234				•													
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235 236) MOI	LECUI	LE TY	PE:	pro	tein									
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235 236 237 238) SE(QUENC	LECUI	LE TY	/PE:	pro	tein SEQ :				Tue	Pro	Val	ΛĪα	Uic	
235 236 237 238 239	Met) SE(QUENC	LECUI	LE TY ESCRI Ser	PE:	pro	tein SEQ :		Ser		Lys	Pro	Val		His	
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235 236 237 238 239 240 241 242 243 244 245 246 247	Met 1 Val Arg	Val Val) MOI QUENC Arg Ala Asn 35	Ser Asn 20	Ser 5 Pro	PE: IPTIC Ser Gln Leu	prod ON: : Arg Ala	Thr Glu Asn	Pro Gly 25 Gly	Ser 10 Gln Val	Asp Leu Glu	Gln	Trp Arg 45	Leu 30 Asp	15 Asn Asn	Arg Gln	
235 236 237 238 239 240 241 242 243 244 245 246 247 248	Met 1 Val Arg	Val Val Ala) MOI QUENC Arg Ala Asn 35	Ser Asn 20	Ser 5 Pro	(PE: IPTIC Ser Gln Leu	prod ON: S Arg Ala Ala	Thr Glu Asn	Pro Gly 25 Gly	Ser 10 Gln Val	Asp Leu Glu	Gln Leu Tyr	Trp Arg 45	Leu 30 Asp	15 Asn Asn	Arg Gln	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249	Met 1 Val Arg	Val Val) MOI QUENC Arg Ala Asn 35	Ser Asn 20	Ser 5 Pro	PE: IPTIC Ser Gln Leu	prod ON: : Arg Ala	Thr Glu Asn	Pro Gly 25 Gly	Ser 10 Gln Val	Asp Leu Glu	Gln	Trp Arg 45	Leu 30 Asp	15 Asn Asn	Arg Gln	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250	Met 1 Val Arg	Val Val Ala Val 50	MOI QUENC Arg Ala Asn 35	ECUI Ser Asn 20 Ala	Ser 5 Pro Leu Ser	(PE: IPTIC Ser Gln Leu Glu	prof ON: S Arg Ala Ala Gly 55	Thr Glu Asn 40	Pro Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile	Gln Leu Tyr	Trp Arg 45 Ser	Leu 30 Asp	15 Asn Asn Val	Arg Gln Leu	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251	Met 1 Val Arg Leu	Val Val Ala Val 50	MOI QUENC Arg Ala Asn 35	ECUI Ser Asn 20 Ala	Ser 5 Pro Leu Ser	PE: IPTIC Ser Gln Leu	prof ON: S Arg Ala Ala Gly 55	Thr Glu Asn 40	Pro Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile	Gln Leu Tyr	Trp Arg 45 Ser	Leu 30 Asp	15 Asn Asn Val	Arg Gln Leu	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252	Met 1 Val Arg	Val Val Ala Val 50	MOI QUENC Arg Ala Asn 35	ECUI Ser Asn 20 Ala	Ser 5 Pro Leu Ser	(PE: IPTIC Ser Gln Leu Glu	prof ON: S Arg Ala Ala Gly 55	Thr Glu Asn 40	Pro Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile	Gln Leu Tyr	Trp Arg 45 Ser	Leu 30 Asp	15 Asn Asn Val	Arg Gln Leu	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253	Met 1 Val Arg Leu Phe 65	Val Val Ala Val 50	MOI QUENC Arg Ala Asn 35 Val	Ser Asn 20 Ala Pro	Ser 5 Pro Leu Ser	PE: IPTIC Ser Gln Leu Glu Ala 70	production	Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile 75	Gln Leu Tyr 60	Trp Arg 45 Ser	Leu 30 Asp Gln	15 Asn Asn Val Glu	Arg Gln Leu Leu 80	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254	Met 1 Val Arg Leu Phe 65	Val Val Ala Val 50	MOI QUENC Arg Ala Asn 35 Val	Ser Asn 20 Ala Pro	Ser 5 Pro Leu Ser Lys	(PE: IPTIC Ser Gln Leu Glu	production	Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr	Ser 10 Gln Val Leu Phe	Asp Leu Glu Ile 75	Gln Leu Tyr 60	Trp Arg 45 Ser	Leu 30 Asp Gln	15 Asn Asn Val Glu Leu	Arg Gln Leu Leu 80	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255	Met 1 Val Arg Leu Phe 65	Val Val Ala Val 50	MOI QUENC Arg Ala Asn 35 Val	Ser Asn 20 Ala Pro	Ser 5 Pro Leu Ser	PE: IPTIC Ser Gln Leu Glu Ala 70	production	Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr	Ser 10 Gln Val Leu	Asp Leu Glu Ile 75	Gln Leu Tyr 60	Trp Arg 45 Ser	Leu 30 Asp Gln	15 Asn Asn Val Glu	Arg Gln Leu Leu 80	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256	Met 1 Val Arg Leu Phe 65	Val Val Val So Val Val So Val	MOD QUENC Arg Ala Asn 35 Val Tyr	Ser Asn 20 Ala Pro Ile	Ser 5 Pro Leu Ser Lys Ala	PE: CPTIC Ser Gln Leu Glu Ala 70 Val	prononness Arg Ala Ala Gly 55 Asn	Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr Lys	Ser 10 Gln Val Leu Phe	Asp Leu Glu Ile 75 Lys	Gln Leu Tyr 60 Gly Val	Trp Arg 45 Ser Ile Asn	Leu 30 Asp Cln Thr	15 Asn Asn Val Glu Leu 95	Arg Gln Leu Leu 80 Ser	
235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255	Met 1 Val Arg Leu Phe 65	Val Val Val So Val Val So Val	MOD QUENC Arg Ala Asn 35 Val Tyr	Ser Asn 20 Ala Pro Ile	Ser 5 Pro Leu Ser Lys Ala	PE: IPTIC Ser Gln Leu Glu Ala 70	prononness Arg Ala Ala Gly 55 Asn	Thr Glu Asn 40 Leu Ser	Gly 25 Gly Tyr Lys	Ser 10 Gln Val Leu Phe	Asp Leu Glu Ile 75 Lys	Gln Leu Tyr 60 Gly Val	Trp Arg 45 Ser Ile Asn	Leu 30 Asp Cln Thr	15 Asn Asn Val Glu Leu 95	Arg Gln Leu Leu 80 Ser	

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/060,294

DATE: 08/06/1999 TIME: 11:54:16

INPUT SET: S32807.raw

Line

Error

Original Text



RAW SEQUENCE LISTING PATENT APPLICATION US/09/060,294

DATE: 08/05/1999 TIME: 15:22:31

INPUT SET: S32807.raw

This Raw Listing contains the General Information Section and those Sequences containing ERRORS.

	1	SEQUENCE LISTING								
	2		_							
	3	(1) General Information:	Does Not Comply							
	4		Corrected Diskette Needed							
	5	(i) APPLICANT: Martin Roland Jensen	= 10110110 14CBUBC							
	6	Soren Mouritsen								
	7	Henrik Elsner								
	8	Iben Dalum								
	9	(11) MINIT OF THIRDWIND W. A. S. C. A. Norm	mum -luba malagular Dua							
	10	(ii) TITLE OF INVENTION: Modified hum								
	11	encoding them, and vaccines c	ontaining said modified							
	12	TNF-alpha or DNA								
	13 14	/iii NUMBER OF CHOURNORS. 42								
	14 15	(iii) NUMBER OF SEQUENCES: 42								
	16	(iv) CORRESPONDENCE ADDRESS:								
	17	(A) ADDRESSEE: Farmaceutisk Lab	oratorium Ferring A/S							
	18	(B) STREET: Indertoften 10	oracorrum rerring A/S							
	19	(C) CITY: Vanloese								
	20	(E) COUNTRY: Denmark,								
->	21	(F) POSTAL CODE ZIP : DK-2720								
	22	(1)								
	23	(v) COMPUTER READABLE FORM:	•							
	24	(A) MEDIUM TYPE: Floppy disk								
	25	(B) COMPUTER: IBM PC compatible								
	26	(C) OPERATING SYSTEM: PC-DOS/MS	-DOS							
	27	(D) SOFTWARE: PatentIn Release								
	28	· :								
	29	(vi) CURRENT APPLICATION DATA:								
	30	(A) APPLICATION NUMBER: 09/060,	294							
	31	(B) FILING DATE: 15-APR-1998								
	32									
	33	(vii) PRIOR APPLICATION DATA:								
	34	(A) APPLICATION NUMBER: 60/044,	187							
	35	(B) FILING DATE: 24-APR-1997								
	36									
	.37	(viii) ATTORNEY/AGENT INFORMATION:								
	38	(A) NAME: Price, D. Douglas								
	39	(B) REGISTRATION NUMBER: 24,514								
	40	(C) REFERENCE/DOCKET NUMBER: P6	0953US1							
	41									
	42	(ix) TELECOMMUNICATION INFORMATION:								
	43	(A) TELEPHONE: (202) 638-6666								
	44	(B) TELEFAX: (202) 393-5350								

RAW SEQUENCE LISTING PATENT APPLICATION US/09/060,294

DATE: 08/05/1999 TIME: 15:22:32

INPUT SET: S32807.raw

ERRORED SEQUENCES FOLLOW:

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(2) INFORMATION FOR SEQ ID NO: 4:
 229
           (i) SEQUENCE CHARACTERISTICS:
 230
                 (A) LENGTH: 158 amino acids
 231
 232
                 (B) TYPE: amino acid
 233(D) TOPOLOGY: linear
 234
          (ii) MOLECULE TYPE: protein
 235
 236
      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
 237
 238
 239
      Met Val Arg Ser Ser Arg Thr Pro Ser Asp Lys Pro Val Ala His
 240
 241
      Val Val Ala Asn Pro Gln Ala Glu Gly Gln Leu Gln Trp Leu Asn Arg
 242
 243
 244
      Arg Ala Asn Ala Leu Leu Ala Asn Cly Val Glu Leu Arg Asp Asn Gln
 245
 246
 247
      Leu Val Val Pro Ser Glu Gly Leu Tyr Leu Ile Tyr Ser Gln Val Leu
 248
 249
 250
      Phe Gln Tyr Ile Lys Ala Asn Ser Lys Phe Ile Gly Ile Thr Glu Leu
 251
 252
                           70
 253
      Ile Ser Arg Ile Ala Val Ser Tyr Gln Thr Lys Val Asn Leu Leu Ser
 254
 255
                        85
 256
      Ala Ile Lys Ser Pro Cys Gln Arg Glu Thr Pro Glu Gly Ala Glu Ala
 257
 258
 259
      Lys Pro Trp Tyr Glu Pro Ile Tyr Leu Gly Gly Val Phe Gln Leu Glu
 260
 261
                                   120
 262
      Lys Gly Asp Arg Leu Ser Ala Glu Ile Asn Arg Pro Asp Tyr Leu Asp
 263
 264
                               135
 265
      Phe Ala Glu Ser Gly Gln Val Tyr Phe Gly Ile Ile Ala Leu
 266
 267
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 268
 269
1514
      (2) INFORMATION FOR SEQ ID NO: 31:
1515
1516
           (i) SEQUENCE CHARACTERISTICS:
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(A) LENGTH: 99 amino-acids

RAW SEQUENCE LISTING PATENT APPLICATION US/09/060,294

DATE: 08/05/1999 TIME: 15:22:32

INPUT SET: S32807.raw

	1518	(B) TYPE: nucleic acid
	1519	(C) STRANDEDNESS: single
	1520	(D) TOPOLOGY: linear
	1521	
	1522	(ii) MOLECULE TYPE: DNA (genomic)
	1523	
	1524	(iii) HYPOTHETICAL: NO
	1525	
	1526	(iv) ANTI-SENSE: NO
	1527	
	1528	(vi) ORIGINAL SOURCE:
	1529	(A) ORGANISM: Homo sapiens
	1530	
	1531	(ix) FEATURE:
	1532	(A) NAME/KEY: insertion_seq
	1533	(B) LOCATION: 1274
	1534	(C) IDENTIFICATION METHOD: experimental
	1535	(D) OTHER INFORMATION:/function= "Primer for PCR cloning
	1536	of DNA encoding TNF-alpha analog"
	1537	/evidence= EXPERIMENTAL
	1538	/organism= "Homo sapiens"
	1539	/standard_name= "Primer "mut30-3""
	1540	/label= mut30-3
	1541	/note= "Primer "mut30-3" is a synthetically synthesised
	1542	100-mer oligonucleotide comprising DNA encoding human T
	1543	cell epitope P30 between stretches of DNA homologous to
	1544	stretches of the human TNF-alpha gene"
	1545	
	1546	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 31:
	1547	/^
	1548	CCCAGGTCCT CTTCAACAAC TTTACCGTCT CCTTCTGGCT TCGGGTACCC
>	1549	AAGGTCAGCG 60
	1550	
	1551	CTAGCCACCT CGAGGTCTCC TACCAGACCA AGGTCAACCT 100
	1552	
	1553	

SEQUENCE VERIFICATION REPORT PATENT APPLICATION US/09/060,294

DATE: 08/05/1999 TIME: 15:22:32

INPUT SET: S32807.raw

Line	Error	Original Text
21	Unknown or Misplaced Identifier	(F) POSTAL CODE (ZIP): DK-2720
159	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 3:
237	Wrong or Missing Sequence Topology	(xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
270	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 5:
380	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 7:
490	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 9:
601	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 11:
711	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 13:
822	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 15:
933	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 17:
1043	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 19:
1153	Stop Codon at end of sequence removed - no error	(2) INFORMATION FOR SEQ ID NO: 21:
1517	Entered (100) and Calc. Seq. Length (50) differ	(A) LENGTH: 100 base pairs
1549	# of Sequences for line conflicts w/ running total	AAGGTCAGCG 60